

Notice of Allowability

Application No.

10/796,577

Examiner

Nikita Wells

Applicant(s)

TESTONI, ANNE L.

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Examiner's Amendment on November 27, 2006 and "Amendment B" received September 1, 2006.

2. ☒ The allowed claim(s) is/are 1-2, 4-32, and 36-53.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 11/27/06.

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

Nikita Wells
Primary Examiner
Art Unit: 2881

DETAILED ACTION

Examiner's amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mary R. Olynick on November 27, 2006.

The Examiner initiated an Interview with the Applicant in order to correct faulty claim dependencies in claims 4 and 36. The following are the necessary corrections:

In claim 4, line 1: "claim 3" has been changed to --claim 1--, and "the image" has been changed to --an image--.

In claim 36, line 1: "claim 35" has been changed to --claim 32--, and "the image" has been changed to --an image--.

Allowable Subject Matter

3. Claims 1-2, 4-32, and 36-53 are allowed.
4. The following is an examiner's statement of reasons for allowance:

The Applicant amended the independent claims 1, 15, 32, and 47, and presented arguments in favor of allowance of the amended claims according to the "Amendment B" received September 1, 2006. With respect to the amended independent claims 1, 15, 32, and 47, the Applicant demonstrated to the Examiner's satisfaction that the 35 U.S.C. 102(b and e) rejections, as well as the 35 U.S.C. 103(a) rejections, over the primary references of M. Sato

Art Unit: 2881

(5,457,725), Yun et al. (2003/0223536), J. Ladell (3,046,399), and L. Parobek (4,959,848), are no longer applicable to the Applicant's invention.

With respect to the independent claims 1, 15, 32, and 47, M. Sato, Yun et al., J. Ladell, and L. Parobek, as well as any other prior art, fail to disclose a method and apparatus of inspecting a defect in or on a semiconductor wafer, comprising: directing a beam towards the surface of the semiconductor wafer wherein the defect resides to thereby emit X-rays; detecting the emitted X-rays with plurality of detectors positioned at a plurality of angles with respect to the wafer surface; collecting X-ray data from the detectors; and based on the X-ray data collected from the detectors at the plurality of angles, determining a location of the defect in three dimensions in relation to a plurality of different process layers of the wafer. The key element in the applicant's invention, which is not found in the prior art, is the collection of the X-ray data from the detectors at the plurality of angles, thereby determining a location of the defect in three dimensions in relation to the plurality of different process layers of the wafer.

The dependent claims 2 and 4-14; 16-31 and 42-46; 36-41; and 48-53, are allowed by virtue of their dependence upon the independent claims 1, 15, 32, and 47, respectively.

Conclusion

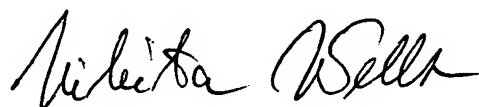
5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikita Wells whose telephone number is (571) 272-2484. The

Art Unit: 2881

examiner can normally be reached on 8:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn, can be reached on (571) 272-2312. The central fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nikita Wells, Primary Examiner
Art Unit 2881
November 27, 2006